

- 8 -

Serial No.: 08/984,099
Group Art Unit: 1638

66. An isolated DNA sequence comprising SEQ ID NO: 15.
67. An isolated nucleic acid sequence comprising a polynucleotide sequence encoding the polypeptide sequence set forth in SEQ ID NO: 2.
68. An isolated nucleic acid sequence comprising a polynucleotide sequence encoding the polypeptide sequence set forth in SEQ ID NO: 13.

REMARKS

Claims 1 - 10, 12 - 16, 18 - 26, 28, 30 - 39, 42, 44 - 55, 57, 59, 61, and 65 - 68 are pending in the application. Claims 4, 10, 14, 16, 18, 32 and 47 have been amended. No new matter has been added.

The Applicant reserves the right to prosecute, in one or more patent applications, the canceled claims, the claims to non-elected inventions, the claims as originally filed, and any other claims supported by the specification. Any amendments made to the claims herein were made solely to expedite and facilitate prosecution and were not made nor should they be construed to have been made to overcome any issue of unpatentability of the claims prior to amendment or in acquiescence of the Examiner's rejections to the claims.

Rejection under 35 U.S.C. § 112, first paragraph

Claims 1-10, 12-16, 18-23, 28, 30 - 39, 42, 44 - 55, 57 and 59 remain rejected under 35 U.S.C. § 112, first paragraph as allegedly containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claims 1-10, 12-16, 18-26, 28, 30 - 39, 42, 44 - 55, 57, 59, 61, 65 and 66 remain rejected and claims 67 and 68 were rejected under 35 U.S.C. § 112, first paragraph, because the specification is allegedly enabling only for claims limited to the 4-4 promoter of pCGN5148, pCGN5149, and pCGN5616, as well as vectors, plant cells, and plants comprising said promoter operably linked

G

- 9 -

Serial No.: 08/984,099
Group Art Unit: 1638

to a coding sequence, and a method of modifying fiber color by transformation with said promoter operably linked to a DNA encoding tyrosinase, tryptophanase or indole oxygenase. The Examiner alleges that the specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention commensurate in scope with these claims. Applicants respectfully traverse the Examiner's rejections under 35 U.S.C. 112, first paragraph.

The Examiner has requested the Applicant to point to support in the specification to indicate that the promoter region present in the pCGN5148, pCGN5149 and pCGN5616 constructs is the sequence of nucleotides 45-4163 of SEQ ID NO:7. The Applicants respectfully submit that it is clear from the specification that the promoter constructs used in Example 9 are those described in detail in Example 5. It is submitted that Applicants have described the preparation of two 4-4 promoter constructs pCGN5606 and pCGN5610 in Example 5. These constructs use the promoter region which is designated by the Applicants as the 4-4 promoter and are described as 4-4 promoter constructs. Subsequently in Example 7 (portion inserted by amendment dated April 3, 2000, page 5, third full paragraph and page 7, first paragraph), Applicants indicate that the genes were cloned into "the 4-4 promoter cassette". As Applicants have only described the 4-4 promoter constructs in Example 5, it is submitted that it is clear from the specification that such constructs were those used in preparing the plasmids pCGN5148, pCGN5149 and pCGN5616 which are the constructs set forth in Example 9.

As to the rac13 promoter, it is submitted that there is no requirement that the Applicants provide definitive proof that SEQ ID NO:15 is a promoter. The law requires that the subject matter be described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. It is submitted that the Applicants have fully described and enabled the invention as claimed. It is well understood in the art that certain portions of the genomic sequence generally function as a transcriptional and translational initiation region (promoter) based on location relative to coding sequence and presence of specific regions in the sequence (i.e. a TATA box). This information reasonably conveys to one of skill in the art that the sequence functions as a promoter.

- 10 -

Serial No.: 08/984,099
Group Art Unit: 1638

Moreover, with regard to claims 23, 24, 61, 65, and 66, it is submitted that Applicants have disclosed other uses for the claimed sequences including the use of these sequences as probes to identify other related promoters and to identify expression patterns in fiber (see for example pages 8, 11, 26 and Examples 1 - 4).

As to claim 14, although it is submitted that Applicants have enabled the full scope of the claim as originally filed, the claim has been amended solely to expedite prosecution.

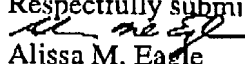
Based on the above arguments and those set forth in the previous responses, it is submitted that the rejections under 35 U.S.C. 112, 1st paragraph should be withdrawn.

Rejection under 35 U.S.C. § 112, second paragraph

Claims 4, 5, 10, 14 - 16, 18 - 22, 31 - 33 and 47 were rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 4, 10, 14, 16, 18, 32 and 47 have been amended to clarify the scope of the claims to the Examiner. As to claim 14, although Applicants have amended the claim solely to expedite prosecution, it is respectfully submitted that the metes and bounds of the phrase "modifying fiber phenotype" are clear (*sec, inter alia*, pages 14 - 21 of the specification). In light of the above, it is respectfully requested that the rejections under 35 U.S.C. 112, second paragraph be withdrawn.

In light of the above arguments and amendments, it is submitted that all of the pending claims are in condition for full and complete allowance and therefore, such action is respectfully requested.

If there are any issues or amendments the Examiner wishes to discuss, she is encouraged to contact the undersigned at the telephone number set forth below.

Respectfully submitted,

Alissa M. Eagle
Registration No. 37,126

Calgene, LLC
1920 Fifth Street
Davis, CA 95616
Phone: (530) 792-2135
Facsimile: (530) 792-2463

G